## **Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. cancelled
- 2. (currently amended) A compound according to claim 1 corresponding to the formula,

$$Z$$
 $Z$ 
 $Z$ 
 $Z$ 
 $Z$ 
 $Z$ 
 $Z$ 
 $Z$ 

wherein L is -O-, -S-, -N=N-, -C(O)-, -(SO<sub>2</sub>)-, or -OC(O)-;

Z is independently in each occurrence hydrogen, halogen, an unsubstituted or inertly substituted hydrocarbyl group, Z'X, or two adjacent Z groups together with the carbons to which they are attached form a fused aromatic ring,

Z" is a divalent derivative of an unsubstituted or inertly substituted hydrocarbyl group joining two or more structures of formula (I), or joining a dienophile group an A functionality, a bound mesogenic poragen forming moiety, or a moiety comprising both an A-functionality and a bound mesogenic poragen forming moiety,

X is a second structure of formula (I), a moiety comprising <u>a dienophile</u> group A functionality, a group comprising a mesogenic poragen forming moiety, or a moiety comprising both <u>a dienophile group</u> an A functionality and a mesogenic poragen forming moiety

and in at least one occurrence, Z is a Z''X group of the formula: –Z''-C≡CM; or in at least one occurrence, Z is a Z''X group of the formula: –Z''-C≡CR and in at least one other occurrence Z is a Z''X group comprising a mesogenic poragen forming moiety; wherein,

M is independently each occurrence a bound mesogenic poragen forming moiety; and

R is independently each occurrence selected from the group consisting of hydrogen,  $C_{1-4}$  alkyl,  $C_{6-60}$  aryl, and  $C_{7-60}$  inertly substituted aryl groups.

3. (original) A compound according to claim 2 corresponding to the formula:

$$R^{1} \xrightarrow{Q} R^{1} \xrightarrow{R^{1}} R^{2}$$

$$Z'' \xrightarrow{n^{1}} R^{2}$$

wherein  $R^1$  independently each occurrence is  $C_{6-20}$  aryl,  $C_{6-20}$  inertly substituted aryl, or  $R^2$ ;

 $R^2$  is  $C_{6\text{-}20}$  aryl- substituted ethynyl, -Z"-M,  $C_{6\text{-}20}$  aryl, or  $C_{6\text{-}20}$  inertly substituted aryl;

Z" is a divalent linking group, and

M is a bound mesogenic poragen forming moiety,

n<sup>1</sup> is a number greater than or equal to zero;

with the proviso that in at least one occurrence  $R^1$  or  $R^2$  is  $C_{6\text{-}20}$  aryl- substituted ethynyl, and in at least one other occurrence  $R^1$  or  $R^2$  is -Z"-M.

4. (original) A compound according to claim 3 wherein

 $R^1$  and  $R^2$  groups are independently selected from the group consisting of:  $C_{6-20}$  aryl- substituted ethynyl, -Z"-M, -C=C-M,  $C_{6-20}$  aryl, and inertly substituted  $C_{6-20}$  aryl;

Z" is selected from the group consisting of: phenylene, biphenylene, phenyleneoxyphenylene, ethynylene, -phenylene- $C_{1-12}$  alkylene-, -phenylene- $C_{1-12}$  alkylene-, -phenylene- $C_{1-12}$  alkylene-O-, -phenylene- $C_{1-12}$ 

-phenylene-O-, -phenylene-C(O)-, -phenylene-C(O)O-, -phenylene-C(O)-NH-,

-phenylene-NH-C(O)-, -phenylene-OC(O)O-, -phenylene-NHC(O)O-,

-phenylene-OC(O)NH-, -phenylene-NHC(O)NH-, -phenylene-C<sub>1-12</sub> alkylene-C(O)O-,

-phenylene- $C_{1-12}$  alkylene-C(O)NH-, -phenylene- $C_{1-12}$  alkylene-OC(O)-,

-phenylene-C<sub>1-12</sub> alkylene-OC(O)NH-, -phenylene-C<sub>1-12</sub> alkylene-NHC(O)O-,

-phenylene-C<sub>1-12</sub> alkylene-OC(O)O-, -phenylene-C<sub>1-12</sub> alkylene-NHC(O)NH-,

-phenylene-O-C<sub>1-12</sub> alkylene-C(O)O-, -phenylene-O-C<sub>1-12</sub> alkylene-C(O)NH-,

-phenylene-O-C<sub>1-12</sub> alkylene-OC(O)-,-phenylene-O-C<sub>1-12</sub> alkylene-OC(O)NH-,

-phenylene-O- $C_{1-12}$  alkylene-NHC(O)O-, -phenylene-O- $C_{1-12}$  alkylene-OC(O)O- and -phenylene-O- $C_{1-12}$  alkylene-NHC(O)NH-; and

M is a discotic mesogenic poragen forming moiety.

- 5. (currently amended) A cross-linked polymer formed by curing a composition comprising a compound according to claim <u>2</u><del>1</del>.
- 6. (original) A porous matrix formed by removing of self-assembled poragens formed from bound mesogenic poragen forming moieties in the cross-linked polymer of claim 5.